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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/690,401	10/20/2003	Benjamin Jay Diamant	060963-0015US	5943
24341 7590 10/27/2008 MORGAN, LEWIS & BOCKIUS, LLP. 2 PALO ALTO SQUARE 3000 EL CAMINO REAL PALO ALTO, CA 94306				
EXAMINER				
TRUONG, CAM Y T				
ART UNIT		PAPER NUMBER		
2169				
MAIL DATE		DELIVERY MODE		
10/27/2008		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/690,401

**Applicant(s)**

DIAMENT, BENJAMIN JAY

**Examiner**

Cam Y T. Truong

**Art Unit**

2169

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 June 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-6,13,15-18,25,27-30 and 37-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25,27-30 and 45-48 is/are allowed.
- 6) ☒ Claim(s) 1,3-6,13,15-18, and 37-44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. Claims 1, 3-6, 13, 15-18, 25, 27-30, 37-48 are pending in this office action.

***Response to Arguments***

2. In view of the Appeal Brief filed on 5/27/2008, PROSECUTION IS HEREBY REOPENED.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) initiate a new appeal by filing a notice of appeal under 37 CFR 41.31 followed by an appeal brief under 37 CFR 41.37. The previously paid notice of appeal fee and appeal brief fee can be applied to the new appeal. If, however, the appeal fees set forth in 37 CFR 41.20 have been increased since they were previously paid, then appellant must pay the difference between the increased fees and the amount previously paid. A Supervisory Patent Examiner (SPE) has approved of reopening prosecution by signing below.

Applicant's arguments with respect to claims 1, 3-6, 37-40 have been considered but are moot in view of the new ground(s) of rejection.

Examiner withdraws 101 rejection for claims 25-30, and 46-48.

However, claims 1, 3-6, 37-40 are rejected under 101 as discussed below.

### ***Claim Objections***

3. Claims 3, 4, 15, 16, 28, 42 and 46 are objected to because of the following informalities:

The term "the last non-zero digit of a respective number" in claims 3, 15 should be written as "a last non-zero digit of a respective number" to make the claims clearer.

The term "the sign of a respective number" in claim 4, 16, 28 should be written as "a sign of a respective number" to make the claims clearer.

The term "the position" in claim 42 and 46 should be written as "a position" to claims clearer.

Appropriate correction is required.

***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

5. Claims 1, 3-6, 37-40 are rejected under 35 U.S.C. 101 because:

The claims 1, 3-6, 37-40 recite the mental steps that do not tied to statutory class (such as a particular apparatus). In particularly, a method claim would not qualify as a statutory process would be a claim that recited purely metal steps. Thus, to qualify as a 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the method steps or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

***Allowable Subject Matter***

6. Claims 1, 3-6, 37-40 are allowed if they get over 101 rejection.

Claims 13, 15-18, 25, 27-30, 41-48 are allowed.

The prior art of record alone or in combination, does not teach or fairly suggest the combination of steps as recited in independent claims 1, 13 and 25, wherein generating an expression of numerical index terms based on the boundary number,

wherein a respective numerical index term in the expression includes information indicative of an integral portion of a logarithm of the boundary number; searching a document index using the expression to identify one or more documents containing numbers that satisfy the expression.

The dependent claims, bring definite, further limiting, and fully enabled by the specification are also allowed.

#### **Contact Information**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam Y T. Truong whose telephone number is (571) 272-4042. The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tony Mahmoudi can be reached on (571) 272-4078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Cam Y Truong/  
Primary Examiner, Art Unit 2169

/Tony Mahmoudi/  
Supervisory Patent Examiner, Art Unit 2169